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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,095	06/04/2007	Jan de Rijk	0108048.0542178	1814
26874 7590 08/15/2011 FROST BROWN TODD, LLC 2200 PNC CENTER 201 E. FIFTH STREET CINCINNATI, OH 45202				
EXAMINER				
STELLING, LUCAS A				
ART UNIT		PAPER NUMBER		
1778				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@fbtlaw.com

Office Action Summary

Application No.

10/596,095

Applicant(s)

DE RIJK, JAN

Examiner

LUCAS STELLING

Art Unit

1778

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2-14-11, 5-09-11, and 5-18-11.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 46-77 and 80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45, 77 and 78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 46-77 and 80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6-8-10.
2. Claims 1-45, 78 and 79 are examined on the merits herein.

Claim Objections

3. Claim 24 is objected to because of the following informalities: Claim 24 recited in element (d) the amount of "Aluminum Sulfate", this should apparently be -- potassium aluminum sulfate -- based on the recitation of claim 1 . Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-45, 78 and 79 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's originally filed specification does not provide support for the metasilicate in an amount of 1-75% by dry weight, and the glyconate in 10-98% by dry weight. In addition, applicant's originally filed specification

does not provide support for the metasilicate in an amount of 1-75% by dry weight, and glyconate in 10-98%, while carbonate is 30-90% and sulfate is 0.5-20%. Claims 2-15, 23-45 and 79 are rejected for their dependence on claim 1.

6. Claim 3 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amounts in claim 3 do not find clear support in the originally filed disclosure.

7. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amounts of claim 9 do not find clear support in the originally filed disclosure.

8. Claim 10 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amounts in claim 10 do not find clear support in the originally filed disclosure.

9. Claim 11 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amounts in claim 11 do not find clear support in the originally filed disclosure.

10. Claim 12 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amounts in claim 12 do not find clear support in the originally filed disclosure.

11. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amounts in claim 14 do not find clear support in the originally filed disclosure.

12. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

possession of the claimed invention. The amounts of claim 15 do not find clear support in the originally filed disclosure.

13. Claim 21 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The inclusion of anti-corrosive agent in the amounts of claim 21 does not find clear support in the originally filed disclosure.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 1-45, and 78 and 79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. Claim 1 recites that the one or more carbonate is in an amount of 30-90% in the composition based on dry weight. However this conflicts with the limitation in claim 1 that the one or more metasilicate is in an amount of 1-75% by weight, since supposing the carbonate is at the minimum amount of 30%, under no case could the metasilicate be at its maximum of 75% by weight. Correspondingly, if the carbonate were at the minimum of 30% under no case could the glyconate be at the maximum of the range of 98% by weight. Accordingly, there claim 1 is indefinite since it is not clear what the scope and bounds of the claim are. Claims 2-45 and 78 and 79 are rejected for their dependence on claim 1.

17. In Claim 3 some of the ranges recited fall outside of the ranges specified in claim 1. Accordingly, claim 3 is indefinite since it is not clear what the scope and bounds of the claim are.

18. In Claim 9 some of the ranges recited fall outside of the ranges specified in claim 1. Accordingly, claim 9 is indefinite since it is not clear what the scope and bounds of the claim are.

19. In Claim 10 some of the ranges recited fall outside of the ranges specified in claim 1. Accordingly, claim 10 is indefinite since it is not clear what the scope and bounds of the claim are.

20. In Claim 11 some of the ranges recited fall outside of the ranges specified in claim 1. Accordingly, claim 11 is indefinite since it is not clear what the scope and bounds of the claim are.

21. In Claim 12 some of the ranges recited fall outside of the ranges specified in claim 1. Accordingly, claim 12 is indefinite since it is not clear what the scope and bounds of the claim are.

22. In Claim 14 the one or more inorganic salts being in an amount of 40-95% conflicts with the ranges specified in claim 1. Supposing that carbonate were present in the minimum amount of 30%, under no case could the further inorganic salts be in an amount of 40-95%.

23. Claim 15, recites that the composition further comprises from about 2mM to about 50mM of one or more buffering agents. However, the units mM (milli-molar) are units of concentration in liquid, and the composition of claim 6 is based on dry weight

and does not specify water. Accordingly it is not clear whether water is included, and how much, or whether the concentration of buffering is applicant's intended use of the composition. Claim 29, 78 and 79 are rejected for its dependence on claim 15.

24. Claim 16 recites the limitation "the water" in line 2. There is insufficient antecedent basis for this limitation in the claim.

25. Claim 18 recites the limitation "the supply of water" in line 1. There is insufficient antecedent basis for this limitation in the claim.

26. In Claim 24 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at ~4 weight percent based on using 1 kg of glyconate, 10 kg of metasilicate, 10kg of carbonate and 5 kg of aluminum sulfate, but this is outside the minimum range of 10% glyconate of claim 1. Accordingly, claim 24 is indefinite since it is not clear what the scope and bounds of the claim are.

27. In Claim 25 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at ~7 weight percent based on using 1 kg of glyconate, 6 kg of metasilicate, 5kg of carbonate and 2 kg of potassium aluminum sulfate, but this is outside the minimum range of 10% glyconate of claim 1. Accordingly, claim 25 is indefinite since it is not clear what the scope and bounds of the claim are.

28. In Claim 26 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at ~3.2 weight percent based on using 1 kg of glyconate, 10 kg of metasilicate, 10 kg of carbonate and 5 kg of potassium aluminum sulfate, and 5 kg of inorganic salt, but this is outside the minimum range of

10% glyconate of claim 1. Accordingly, claim 26 is indefinite since it is not clear what the scope and bounds of the claim are.

29. In Claim 27 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at ~6 weight percent based on using 1kg of glyconate, 6 kg of metasilicate, 5kg of carbonate and 2 kg of potassium aluminum sulfate, and 2 kg of inorganic salt, but this is outside the minimum range of 10% glyconate of claim 1. Accordingly, claim 27 is indefinite since it is not clear what the scope and bounds of the claim are.

30. In Claim 42 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at far less than 10% weight percent based on using 0.00 mg/L glyconate, 1,000mg/L metasilicate, 850mg/L of carbonate, and 830 mg/L of potassium aluminum sulfate, and 920 mg/L of salt, but this is outside the minimum range of 10% of glyconate for claim 1. Accordingly, claim 42 is indefinite since it is not clear what the scope and bounds of the claim are.

31. In Claim 43 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at far less than 10 weight percent based on using 0.5mg/L glyconate, 500 mg/L of metasilicate, 720mg/L sodium carbonate, 275 mg/L of potassium aluminum sulfate, and 300 mg/L of salt but this is outside the minimum range of 10% glyconate of claim 1. Accordingly, claim 43 is indefinite since it is not clear what the scope and bounds of the claim are.

32. In Claim 44 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at less than 10 weight percent based

on using 0.8 mg/L glyconate, 7 mg/L of metasilicate, 4.8 mg/L sodium carbonate, 1.9 mg/L of potassium aluminum sulfate, and 2.8 mg/L of salt but this is outside the minimum range of 10% glyconate of claim 1. Accordingly, claim 44 is indefinite since it is not clear what the scope and bounds of the claim are.

33. In Claim 45 some of the ranges recited fall outside of the ranges specified in claim 1. For example glyconate is contemplated at less than 10 weight percent based on using 0.9mg/L glyconate, 6.5 mg/L of metasilicate, 4.00 mg/L sodium carbonate, 1.35 mg/L of potassium aluminum sulfate, and 1.35 mg/L of salt, and 1.1mg/L of fragrances, but this is outside the minimum range of 10% glyconate of claim 1. Accordingly, claim 45 is indefinite since it is not clear what the scope and bounds of the claim are.

34. Claims 30- 41 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 30-41 indicate that the relative concentrations of the constituent components in the composition, and claims that these concentrations are the concentrations in the final concentration in the water to be treated. It is unclear whether the composition includes water, or whether this is simply applicant's preferred mode of use.

35. Claim 78 recites the limitation "the water system" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Response to Arguments

36. Applicant's arguments filed 2-14-11 have been fully considered but they are not persuasive.
37. Applicant argues with respect to the indefiniteness rejection of claim 30-41 that the claims have been amended to clearly recite the aqueous solution, however these amendments are not found.
38. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.
39. This prior art rejection of claim 1 with Toru as a primary reference is presently withdrawn in view of the claimed glyconate range of 10-98% by weight recited in claim 1. Toru teaches 0-4% and does not teach nor fairly suggest the range of 10-98%.

Conclusion

40. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUCAS STELLING whose telephone number is (571)270-3725. The examiner can normally be reached on Monday through Friday 9:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Las 8-9-11

/Nam X Nguyen/
Supervisory Patent Examiner, Art
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